Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (cancelled)

2. (new) A method for determining customized feed for at least one animal, the method comprising:

receiving animal data representative of the characteristics of the animal;

receiving feed data representative of feed ingredients;

generating nutritional profile data representative of a desirable nucleic acid material content for the animal based upon the animal data; and

generating formulation including data representative of a combination of feed ingredients, formulation data being generated based upon the nutritional profile data and the feed data.

3. (new) The method of claim 2, wherein the nutritional profile includes a level of nucleic acid material determined to optimize a criteria based upon the animal data.

4. (new) The method of claim 3, wherein the nutritional profile includes data representative of at least one additional nutrient component.

5. (new) The method of claim 2, wherein the nutritional profile data is representative of at least two nutrient components, the method further comprising the step of generating a set of formulation data based upon variation data representative of a range for at least one nutrient component of the nutritional profile.

6. (new) The method of claim 2, wherein the feed ingredients include at least one of a carbohydrate source, a protein source, a fat source, a vitamin source, a mineral source and a nucleic acid material source.

7. (new) A method for determining customized feed for at least one animal, the method comprising:

receiving animal data representative of the characteristics of the animal;

receiving feed data representative of feed ingredients;

receiving evaluation data representative of at least one evaluation criteria;

generating nutritional profile data representative of a desirable nucleic acid material content for the animal based upon the animal data; and

generating formulation including data representative of a combination of feed ingredients; formulation data being generated based upon the nutritional profile data, the feed data and the evaluation data.

8. (new) The method of claim 7, wherein the nutritional profile includes a level of nucleic acid material determined to optimize a criteria based upon the animal data.

9. (new) The method of claim 8, wherein the evaluation criteria includes at least two criteria.

10. (new) The method of claim 9, wherein the evaluation criteria include an associated optimization weighting data , the method further comprising the step of generating a formulation data representative of the effect of the optimization weighting data.

11. (new) The method of claim 8, wherein the nutritional profile includes data representative of at least one additional nutrient component.

12. (new) The method of claim 7, wherein the nutritional profile data is representative of at least two nutrient components, the method further comprising the step of generating a set of formulation data based upon variation data representative of a range for at least one nutrient component of the nutritional profile.

13. (new) The method of claim 7, wherein the feed ingredients include at least one of a carbohydrate source, a protein source, a fat source, a vitamin source, a mineral source and a nucleic acid material source.

14. (new) A method for optimizing the growth rate of an animal, the method comprising:

receiving animal data representative of the characteristics of the animal;

receiving feed data representative of feed ingredients;

receiving evaluation data representative of at least one evaluation criteria;

generating nutritional profile including a data representative of a desirable nucleic acid material content for the animal based upon the animal data; and

generating formulation data representative of a combination of feed ingredients, formulation data being generated based upon the nutritional profile data, the feed data and the evaluation data.

15. (new) The method of claim 14, wherein the nutritional profile includes a level of nucleic acid material determined to optimize a criteria based upon the animal data.

16. (new) The method of claim 15, wherein the evaluation criteria includes at least two criteria.

17. (new) The method of claim 16, wherein the evaluation criteria include an associated optimization weighting data , the method further comprising the step of generating a formulation data representative of the effect of the optimization weighting data.

18. (new) The method of claim 15, wherein the nutritional profile includes data representative of at least one additional nutrient component.

19. (new) The method of claim 14, wherein the nutritional profile data is representative of at least two nutrient components, the method further comprising the step of generating a set of formulation data based upon variation data representative of a range for at least one nutrient component of the nutritional profile.

20. (new) The method of claim 14, wherein the feed ingredients include at least one of a carbohydrate source, a protein source, a fat source, a vitamin source, a mineral source and a nucleic acid material source.

21. (new) The method of claim 14, wherein the animal is newly weaned.

22. (new) The method of claim 15, wherein the animal is intestinally challenged.

23. (new) The method of claim 15, wherein the formulation data is used to create an animal feed having a customized nucleic acid material content.

24. (new) The method of claim 23, wherein the method is utilized in production of a food product from an animal fed the animal feed.